Technical Committee 184: Industrial automation systems and integration
Subcommittee 4: Industrial data

ISO NWI/CD Ballot Results
for ISO 13584-0025

Logical resources: Logical model of supplier library with aggregate values and explicit content".

The proposals were circulated among SC4 members for its vote on 2001-02-26. 14 of our 18 P-members responded to the NWI ballot:

COUNTRY	Agree to addition of NWI	Prepared to participate	Relevant documentation	SVAT Score	Annex Q
Australia	Y	N	N	15	Y
Canada	A	N	N	15	y
China	Y	Y	N	21	y
France	Y	Y		25	y
Germany	Y	Y	N	23	Y
Italy	A				
Japan	Y	Y	N		
Korea	Y	N	N		
Netherlands	A	N	N		
Norway	Y	N	N	19	y
Sweden	A				
Switzerland	Y	N	N	15	y
United Kingdom	Y	N	N	15	y
United States	Y	Y	N	18	
Totals:	10	5	**Average SVAT points:**	15.1	

The SC4 Secretary has reviewed the NWI ballot responses and in consultation with the Chair proposes that

This document is also available digitally through SOLIS via ftp or www http://www.nist.gov/sc4/ndocs/n1195

11 of our 18 P-members responded to the CD ballot:

COUNTRY	VOTE	COMMENTS
Australia	A	
Canada		
China	Y	
Czech Republic		
France	Y	Attached
Germany	Y	Attached
Italy		
Japan	Y	
Korea	Y	
Netherlands	A	Attached
Norway	Y	
Portugal		
Russia		
Spain		
Sweden	A	
Switzerland		
United Kingdom	A	
United States	Y	

The SC4 Secretary has reviewed the CD ballot responses and in consultation with the Chair has decided that

Ballot Comments

NOTE:
**Some of these comment may have been scanned using Optical Character Recognition and have not been verified as
100% accurate. Please refer to the original hard copy in cases of irregularities.**

France

ISO/CD 13584-25

Annex to the French ballot

France agrees to the circulation of the draft as a DIS with the following comments:

ISSUE NUMBER: FR25-1
ORIGINATOR: P. Huau,GOSET,pascalhuau@compuserve.com
SENTENCE/ABSTRACT/KEYWORD:
DESCRIPTION:
All the ISO 10303 standards have a clause Information object registration. This clause provide unique identifiers for the schemas that are defined in the document, identifiers that are useful when the schemas are corrected or amended.
This document has not such a clause. Why?

PROPOSED SOLUTION:
Add an Information object registration clause.

ISSUE NUMBER: FR25-2
ORIGINATOR: P. Huau,GOSET,pascalhuau@compuserve.com
SENTENCE/ABSTRACT/KEYWORD:
DESCRIPTION:
According to the editorial directives, the index shall have only one column.

PROPOSED SOLUTION:
Provide the index in a single-column format.

ISSUE NUMBER: FR25-3
ORIGINATOR: P. Huau,GOSET,pascalhuau@compuserve.com
SENTENCE/ABSTRACT/KEYWORD:
DESCRIPTION:
Having a specific Express schema for each conformance class is not a good way to have the standard implemented
(Implementors usually do not want to implement multiple schemas as it leads to develop multiple software).
It would be better to have a single Express schema and to specify, per conformance class, which concepts can be left
unprocessed.

NB: an implementor shall always be free to implement all the entities. A conformance class only identifies the
minimum subset of entities in an Express schema a reading interface shall fully interpret.

PROPOSED SOLUTION:
Define conformance classes as list of entities, selected in a single Express schema, to be interpreted

ISSUE NUMBER: FR25-4
ORIGINATOR: P. Huau,GOSET,pascalhuau@compuserve.com
SENTENCE/ABSTRACT/KEYWORD:
DESCRIPTION:
The scope clause lists among other scope items the following one:
"description of assembled parts that may contain an unlimited number of constituent
components"

The only way to describe such assemblies using ISO 10303 resources is to use resources defined in ISO 10303-44 (e.g.
assembly_component_usage_occurrence). But the present part does not use these resources.
Therefore, either the scope item is not covered, or it is covered in a way that makes it not interoperable with description of
assemblies made with STEP APs (203, 214, …).

PROPOSED SOLUTION:
Describe assembled part using ISO 10303-44 constructs or remove the scope item.

ISSUE NUMBER: FR25-5
ORIGINATOR: P. Huau,GOSET,pascalhuau@compuserve.com
SENTENCE/ABSTRACT/KEYWORD:
DESCRIPTION:
Normative references of ISO 10303-41 and -42 are outdated. Both documents have had a 2nd edition in 2000.

PROPOSED SOLUTION:
Update the normative references.

ISSUE NUMBER: FR25-6
ORIGINATOR: P. Huau,GOSET,pascalhuau@compuserve.com
SENTENCE/ABSTRACT/KEYWORD:
CLAUSE: 5.4.1.1
DESCRIPTION:

The rule does not take into account the fact that there are other ISO document statuses than the one listed (e.g. TS, TC, …)

PROPOSED SOLUTION:
Update the normative references.

ISSUE NUMBER: FR25-7
ORIGINATOR: P. Huau,GOSET,pascalhuau@compuserve.com
SENTENCE/ABSTRACT/KEYWORD:
CLAUSE: annex B.4.1
DESCRIPTION:
The role of this annex with respect to the conformance classes is unclear. If it defines additional constraints for the conformance classes, then it should be referred to in the clauses that describe each conformance class.

PROPOSED SOLUTION:
Clarify the role of annex B.4.1

ISSUE NUMBER: FR25-8
ORIGINATOR: P. Huau,GOSET,pascalhuau@compuserve.com
SENTENCE/ABSTRACT/KEYWORD:
CLAUSE: annex B.4.1
DESCRIPTION:
There is no need of a B.4.1 as there is no B.4.2

PROPOSED SOLUTION:
Remove one level.

ISSUE NUMBER: FR25-9
ORIGINATOR: P. Huau,GOSET,pascalhuau@compuserve.com
SENTENCE/ABSTRACT/KEYWORD:
CLAUSE: annex B.4.1
DESCRIPTION:
Functions defined in clauses B.4.1.2/.3/.4 could easily become common resources for SC4.
In order to enable that promotion, they should be:
-    included in an Express schema (as little as possible)
-    the "_25" should be removed (as it does not provide any benefit)

PROPOSED SOLUTION:

ISSUE NUMBER: FR25-10
ORIGINATOR: G. Pierra
SENTENCE/ABSTRACT/KEYWORD: Aggregate_value
CLAUSE: 7.3.2. Aggregate_value
DESCRIPTION: Aggregate_value uses the AGGREGATE EXPRESS data type. this is not allowed.

PROPOSED SOLUTION:

Replace:

The **aggregate_value** entity provides for the definition of data values which may be expressed as aggregates of **primitive_value**s.

EXPRESS specification:

```
*)
ENTITY aggregate_value
```

```
{xe "aggregate_value "}
ABSTRACT SUPERTYPE OF ( ONEOF (
     list_value,
     set_value,
     bag_value,
     array_value)) ;
 values : aggregate OF primitive_value ;
END_ENTITY;
(*
```

<u>Attribute definition:</u>
values : is the aggregate carrying all the values of the described entity.

BY:

7.3.2. **Aggregate_value**

The **aggregate_value** entity provides for the definition of data values which may be expressed as aggregates of **primitive_value**s.

<u>EXPRESS specification:</u>

```
*)
ENTITY aggregate_value
{xe "aggregate_value "}
ABSTRACT SUPERTYPE OF ( ONEOF (
     list_value,
     set_value,
     bag_value,
     array_value)) ;
END_ENTITY;
(*
```
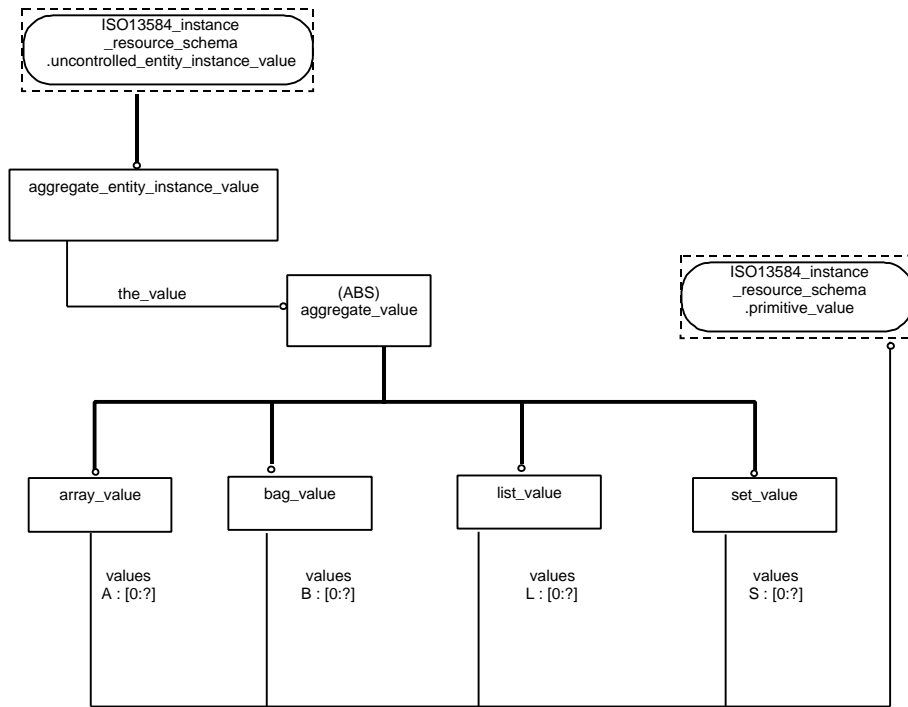
ISSUE NUMBER: FR25-11
ORIGINATOR: G. Pierra
SENTENCE/ABSTRACT/KEYWORD: EXPRESS-G, Aggregate_value
CLAUSE: Annex D, Figure D2
DESCRIPTION: Aggregate_value uses the AGGREGATE EXPRESS data type. this is not allowed.

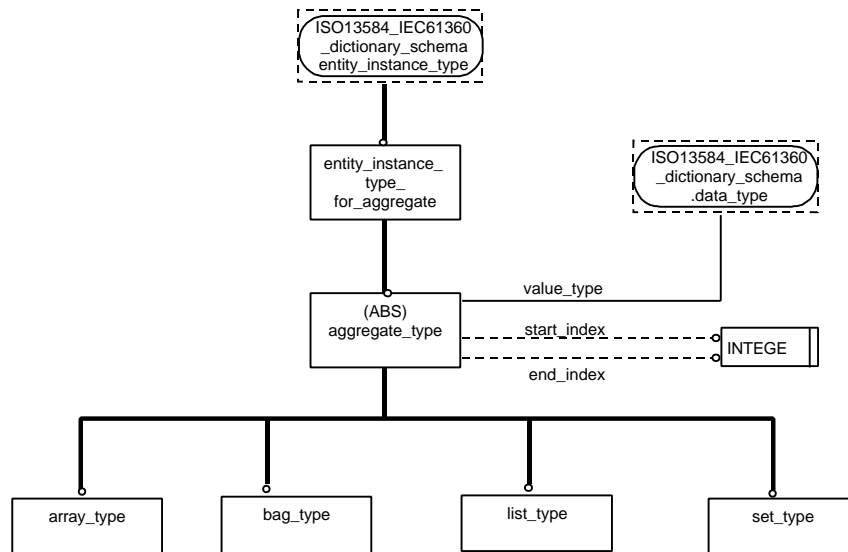PROPOSED SOLUTION: REPLACE the EXPRESS-G by:

ISSUE NUMBER: FR25-12
ORIGINATOR: G. Pierra
SENTENCE/ABSTRACT/KEYWORD: EXPRESS-G, Aggregate_type
CLAUSE: Annex D, Figure D1
DESCRIPTION: EXPRESS-G of Aggregate_type does not reflect its definition

PROPOSED SOLUTION: REPLACE the EXPRESS-G by:

ISSUE NUMBER: FR25-13
ORIGINATOR: G. Pierra
SENTENCE/ABSTRACT/KEYWORD: EXPRESS-G, Aggregate_type
CLAUSE: 7
DESCRIPTION: Error in schema name.
In clause 7, the schema name is ISO13584_aggregate_value_schema

and not ISO13584_IEC61360_dictionary_aggregate_value_schema as it appears in the tiles

PROPOSED SOLUTION: REPLACE every where : ISO13584_IEC61360_dictionary_aggregate_value_schema

BY
ISO13584_aggregate_value_schema

ISSUE NUMBER: FR25-14
ORIGINATOR: G. Pierra
SENTENCE/ABSTRACT/KEYWORD: Entity short name
CLAUSE:
DESCRIPTION: Entity short names are not provided in the document

PROPOSED SOLUTION: Provide entity short name

Germany

Comment on ISO/CD 13584-25

Author: Wolfgang Wilkes, Albert Bullig, University of Hagen
Clause: 8.1.1.1.1, 8.1.2.1.1, 8.1.3.1.1, 8.1.4.1.1 No_content_without_DET_rule
Classification: Minor Technical
Description: it should be possible to exchange dictionary without content and content without dictionary.

The no_content_without_DET_rule forbid to exchange a dictionary_definition without its corresponding content_item if it exists, and to exchange a content_item without its corresponding dictionary_definition. In e-business application the partial exchange of dictionary and content is a strong requirement. Due to this rule this is not possible by now.

Norway

Please also note the following comments from our expert Mr. Jochen Haenisch:

ISSUE NUMBER: NOR-1
AUTHOR: Jochen Haenisch
CLAUSE: annex A
CLASSIFICATION: MAJOR, EDITORIAL
DESCRIPTION: A longform Express schema could not be found on SOLIS; the address in annex A did not work.
PROPOSED SOLUTION: Provide Express longform on Solis and a correct address   to it.

RESOLUTION

ISSUE NUMBER: NOR-2
AUTHOR: Jochen Haenisch
CLAUSE: 6 and following
CLASSIFICATION: MAJOR, TECHNICAL
DESCRIPTION: The Express schemas do not compile without errors. E.g.:

Compilation result of schema: ISO13584_SHORT_FORM_CC0_SCHEMA

```
==================================================================
```

ERROR: Line 57: Unresolved reference in USE FROM declaration.
Line 57: Reference: AGGREGATE_ENTITY_INSTANCE_TYPE
Schema: ISO13584_IEC61360_DICTIONARY_AGGREGATE_EXTENSION_SCHEMA
PROPOSED SOLUTION: Correct the Express code and compile. Show which resources were/shall be used for longform generation.

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